AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) An electronics assembly for monitoring and alerting persons to the spoilage of perishable products, comprising:

One or more oscillators or time-bases;~~, and~~

One or more batteries or energy cells;~~, and~~

An electronic monitoring and/or timing circuit, wherein the electronic monitoring and/or timing circuit comprises a microcontroller and at least one register configured to tune the frequency of the one or more oscillators or time-bases; and

One or more indicators, wherein:

Each of said oscillators or time-bases and each of said monitoring and/or timing circuits is powered by said one or more batteries or energy cells, and each of said indicators is connected to said electronic monitoring and/or timing circuit, so that said assembly functions to perform time and/or time-temperature measurement and to provide alarm status at said one or more indicators when calculated alarm event times occur.

2. (Original) The invention of claim 1 that is incorporated into a label.

3. (Original) The invention of claim 1, wherein the oscillator or time-base is temperature variable.

4. (Original) The invention in claim 1, wherein the oscillator or time-base is fixed-frequency.

5. (Original) The invention of claim 1, wherein the oscillator or time-base is able to be calibrated at the point of manufacturing.

6. (Original) The invention of claim 5, wherein the calibration is achieved with a memory register and capacitor summing technique.

7. (Original) The invention of claim 1, wherein the oscillator or time-base is a ring-type resonant circuit.

8. (Original) The invention of claim 1, wherein the oscillator or time-base employs a silicon-based resonant circuit.

9. (Original) The invention of claim 1, wherein the oscillator or time-base employs a resonant crystal.

10. (Original) The invention of claim 1, further comprising one or more audible alarm devices.

11. (Original) The invention of claim 1, wherein the electronic monitoring and/or timing circuit is capable of measuring temperature.

12. (Canceled)

13. (Original) The invention of claim 1, wherein the electronic monitoring and/or timing circuit is incorporated into one or more integrated circuits.

14. (Original) The invention of claim 1, wherein the indicator or indicators are LEDs.

15. (Original) The invention of claim 1, wherein the indicator or indicators are LCDs.

16. (Currently Amended) A label for monitoring and alerting persons to the spoilage of perishable products, the label comprising an electronics assembly and an outer label cover, the electronics assembly comprising:

One or more oscillators or time-bases;~~, and~~

One or more temperature sensing elements;~~, and~~

One or more batteries or energy cells;~~, and~~

An electronic monitoring and/or timing circuit, wherein the electronic monitoring and/or timing circuit comprises a microcontroller and at least one register configured to tune the frequency of the one or more oscillators or time-bases; and

One or more indicators, wherein:

Each of said oscillators or time-bases and each of said monitoring and/or timing circuits is powered by said one or more batteries or energy cells, and each of said indicators is connected to said electronic monitoring and/or timing circuit, so that said assembly functions to perform time and/or time-temperature measurement and to provide alarm status at said one or more indicators when calculated alarm event times occur.

17. (Original) The invention of claim 16, wherein the oscillator or time-base is temperature variable.

18. (Original) The invention in claim 16, wherein the oscillator or time-base is fixed-frequency.

19. (Original) The invention of claim 16, wherein the oscillator or time-base is able to be calibrated at the point of manufacturing.

20. (Original) The invention of claim 19, wherein the calibration is achieved with a memory register and capacitor summing technique.

21. (Original) The invention of claim 16, wherein the oscillator or time-base is a ring-type resonant circuit.

22. (Original) The invention of claim 16, wherein the oscillator or time-base employs a silicon-based resonant circuit.

23. (Original) The invention of claim 16, wherein the oscillator or time-base employs a resonant crystal.

24. (Original) The invention of claim 16, further comprising one or more audible alarm devices.

25. (Original) The invention of claim 16, wherein the electronic monitoring and/or timing circuit is capable of measuring temperature.

26. (Canceled)

27. (Original) The invention of claim 16, wherein the electronic monitoring and/or timing circuit is incorporated into one or more integrated circuits.

28. (Original) The invention of claim 16, wherein the visual indicator or indicators are LEDs.

29. (Original) The invention of claim 16, wherein the visual indicator or indicators are LCDs.

30. (Currently Amended) A time-temperature integrator comprising an electronics circuit assembly, said circuit assembly comprising:

One or more oscillators or time-bases;~~, and~~

One or more temperature sensing elements;~~, and~~

One or more batteries or energy cells;~~, and~~

An electronic monitoring and/or timing circuit, wherein the electronic monitoring and/or timing circuit comprises a microcontroller and at least one register configured to tune the frequency of the one or more oscillators or time-bases; and

One or more indicators, wherein:

Each of said oscillators or time-bases and each of said monitoring and/or timing circuits is powered by said one or more batteries or energy cells, and each of said indicators is connected to said electronic monitoring and/or timing circuit, so that said assembly functions to perform time and/or time-temperature measurement and to provide alarm status at said one or more indicators when calculated event times occur.

31. (Original) The invention of claim 30, wherein the oscillator or time-base is able to be calibrated at the point of manufacturing.

32. (Original) The invention of claim 31, wherein the calibration is achieved with a memory register and capacitor summing technique.

33. (Original) The invention of claim 30, wherein the oscillator or time-base is a ring-type resonant circuit.

34. (Original) The invention of claim 30, wherein the oscillator or time-base employs a silicon-based resonant circuit.

35. (Original) The invention of claim 30, wherein the oscillator or time-base employs a resonant crystal.

36. (Original) The invention of claim 30, further comprising one or more audible alarm devices.

37. (Original) The invention of claim 30, wherein the electronic monitoring and/or timing circuit is capable of measuring temperature.

38. (Canceled)

39. (Original) The invention of claim 30, wherein the electronic monitoring and/or timing circuit is incorporated into one or more integrated circuits.

40. (Original) The invention of claim 30, wherein the indicator or indicators are LEDs.

41. (Original) The invention of claim 30, wherein the indicator or indicators are LCDs.

42. (Canceled)

43. (New) The invention of claim 30, wherein the oscillator or time-base is temperature variable.

44. (New) The invention of claim 30, wherein the oscillator or time-base is fixed-frequency.